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SPECIAL OFFERS FROM B & C

TECHNICAL INFORMATION

WARP SPEED PLUS REV 7

ANALOG UPGRADE

HAPPY COMPUTERS
IMPORTANT NEWS

HAPPY COMPUTERS Inc.
P.O. Box 1268 (408) 779-3830
Morgan Hill, CA 95037



To:



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QUESTIONNEER - ONLY WRITTEN RESPONSES COUNT, DON'T CALL IN

In order that we may serve you better it would help if you could jot down a few responses to the questions we have below. Our first issue concerns the creation of a backup guide for all users (free!). HAPPY COMPUTERS would appreciate the cooperation of our users to do this. First we need to put some of our customers in charge of the initial phase of compiling this information. We would like to assign one individual the task of compiling the information for one particular software manufacturer. We will send all information we receive from our customer base to these individuals (your name will not be released). Therefore we need to know who wants to do this compilation and what you can contribute. Information for all programs for ATARI personal computers is needed including those from companies no longer in business. We need to know such things as software company name, program name and revision number, which special recovery menu items are needed to make a backup, if slow mode is needed, if forced slow mode works, can the disk be compacted, does it work on the ATARI 1050, etc. HAPPY COMPUTERS will have the final job of editing the information and publication. Please do not send any information yet other than an expression of your desire to participate. We will provide some ATARI program tools to computerize this compilation if the response is sufficient, and we will utilize "THE MUSHROOM" as a medium for communication. For purposes of this compilation we request that all information be verified with original disks from the manufacturers! Express your desire to participate below, and make sure your name and address appears on this questioner.

The second issue concerns general information which may help us to control the tremendous costs of advertising. We need to know what computer oriented magazines you read the ads in, where did you first hear about HAPPY COMPUTERS products, what things helped you to decide to buy our product, and what dealer you would like to see carrying our products.

Next lets talk about new products. If there is something you feel the ATARI computer needs let us know, be as concise as possible including features and price range. Please note that for right now there are no more disk drive ENHANCEMENTS planned (sorry PERCOM, RANA, ASTRA, TRAK, INDUS, MICRO MAIN FRAME, ATR 8000, CENTURIAN, AMDEK).

How about improvements to our existing products ... nobody is perfect ... be nice please.

If you own an 810 what options concerning the 810 CONTROLLER best suit your needs.

Your other constructive comments are also appreciated

810 OWNERS - CHECK IT OUT BEFORE ITS TOO LATE!

ATARI DID A COMPLETE REDESIGN (not for 1050)
75% OF THE 810 DISK DRIVE'S ELECTRONICS WERE IMPROVED
YOUR 810 MAY HAVE THE OLD ELECTRONICS AND BE DOOMED TO FAIL!

WHAT TO CHECK FOR USE THE EASIEST METHOD FOR YOU

METHOD 1 - Open the front door on the disk drive where the disk goes in, and remove any disk thats in there. Look up inside where the disk goes in, toward the top. Look for a circuit board directly above the area where the disk goes in. The board may be more towards the back, but will always be above the slot where you put the disk in. Do not confuse the board on the left with the board on the top. If you do NOT see the circuit board, you have the OLDER ELECTRONICS.

METHOD 2 - With the top of the disk drive removed find the speed adjustment control. If the control is a white button with a slot in it you have the older electronics. Or look at each circuit board. If you have only 2 boards, one on the left with a metal cover, and one in the rear where the power plugs in, and have no third board on top above where the disk goes in you have the old electronics.

IF YOU ALREADY HAVE THE NEW ELECTRONICS

Don't breath a sigh of relief yet! Atari also made one change to the new electronics. On the board that is on top above the disk (the analog board) find the resistor marked on the board as R218, it is in back of C214 slightly to the right and back of the center of the board. If the resistor has the colors red, black, red, gold then you need to either change the resistor to a 1400 ohm resistor, or solder a 4700 ohm resistor in parallel with R218 and you will have a 1400 ohm equivalent. This change will help your disk drive format disks and be more compatible with other disk drives. Call us if you need help.

DON'T PANIC IF YOU HAVE THE OLD ELECTRONICS

HAPPY COMPUTERS has the ANALOG UPGRADE. We are selling a complete kit you may install yourself which includes 9 pages of installation instructions, a new rear board, a new top board and mounting screws, and a pre-assembled cable. All components are brand new surplus and are completely tested by us prior to shipping. No soldering or special tools are required for this installation.

WHAT THE UPGRADE DOES

The upgrade gives your drive a rock solid stable motor speed control circuit, set it and forget it! The disk reading and writing amplifiers are greatly improved, allowing better disk formatting and compatibility with older disks and other drives. Also just as important is the improved power supply which keeps the rest of your drive healthy and working. You get all this by changing out your old rear board with a new one, and adding a new top board. The side board where the ENHANCEMENT is located is not changed at all. The top board is the latest and best design including the correct resistor mentioned above.

Guarantee - UPGRADE NOW

HAPPY COMPUTERS used to charge extra for fully tested boards, now all boards are fully tested by us prior to shipment. We now guarantee the boards against defects in materials for 90 days and will offer an exchange for defective boards. Improper installation voids this warranty.

As of this mailing we have a good supply and have improved our testing so that we can offer this upgrade with fully tested boards at just \$49.95. This is a \$150.00 value from Atari (if you can get it). Add \$10.00 if ordering from outside the USA for airmail shipping. If you order COD by phone add \$5.05 (you pay the charges). If you prepay we pay the shipping. California residents add \$3.25 state sales tax. Don't delay, order now. Once our supply runs out you may not be able to get the upgrade anywhere. If you order and are paying for the rev 7 810 ENHANCEMENT revision you can get a \$5.00 discount on the ANALOG UPGRADE! The ANALOG UPGRADE may also be used for spare parts in case your disk drive breaks down in the future.

REVISION 7 FOR 1050

The WARP SPEED PLUS rev 7 software for the 1050 includes programs which are missing from the rev 6 disk. It fixes a problem that some enhanced 1050 disk drives have with the HAPPY BACKUP and COMPACTOR where you get the "ERROR DURING WRITING" problem. It fixes a problem with some programs where the personal computer locks up after formatting in single density. It also fixes a problem with the move and extract features in the COMPACTOR program. Revision 7.0 upgrade software and instructions is free to all 1050 ENHANCEMENT purchasers that received revision 6 with their unit. You will normally get this from the dealer you purchased the 1050 ENHANCEMENT from. This revision is only for ENHANCEMENTS or MAXIMIZERS that have been upgraded to ENHANCEMENTS.

CLARIFICATION FOR WARP SPEED DOS XL

Both WARP SPEED DOS and WARP SPEED DOS XL have high speed support of HAPPY ENHANCED disk drives and work with non-enhanced disk drives at standard speeds. The WARP SPEED DOS that comes with rev 7 is a patch file to ATARI DOS 2.0s. This does not support double density. The WARP SPEED DOS XL is a modified version of Optimized Systems Software's DOS XL. It can be used with 400, 800, 1200XL, 600XL, and 800XL computers. The best memory utilization will be with either the OSS SUPER CARTRIDGES, or with the XL computers. This does support true double density. It can also be used with standard disk drives and ENHANCED 810 disk drives. It is not free. HAPPY COMPUTERS pays OSS for each WARP SPEED DOS XL sold by HAPPY COMPUTERS. There is at present no update policy for exchanging standard DOS XL for WARP SPEED DOS XL. The price is \$24.95 ppd, add \$3.00 for insurance, and \$5.00 for shipments outside the U.S.A. California residents add \$1.62 state sales tax before April 1 or \$1.75 after April 1.

REVISION 7 FOR 810

The WARP SPEED PLUS revision 7 for the 810 adds many features to the 810 it did not have before. Please note that HAPPY COMPUTERS does not ever plan to have a double density option for 810 disk drives. The features added to the 810 by the WARP SPEED PLUS upgrade are 1) capability to be used with revision 7 and future software, 2) compatibility with 1050 ENHANCEMENTS for disk backup, 3) built in buffered fast write with verify with no special software which makes write with verify about as fast as write without verify with no special software in the personal computer, 4) faster operation with the HAPPY BACKUP and COMPACTOR programs, 5) capability to add a circuit similar to the HAPPY 1050 CONTROLLER for switching slow/fast speeds and write protect with a switch and under software control although we will not have a plug in option to do this on the 810, 6) capability to program the 810 motor turn off delay, 7) easier to access higher data transfer rate read/write commands, 8) capability to reprogram 810 to respond as a different drive number; especially useful with COMPACTED disks where the 810 is not drive 1.

REVISION 7 BACKUP CAPABILITY

WARP SPEED PLUS revision 7 has the capability to backup newer programs that our rev 5.2 (for 810) and rev 6.0 (for 1050) could not do. All programs recently received by us can be backed up by rev 7. For an up to date list of programs included into a specific revision we suggest you call "THE MUSHROOM" bulletin board (you need a modem to do this). HAPPY COMPUTERS will no longer respond by phone with this information. Calling instructions for this BBS are elsewhere in this flyer.

WRITE PROTECT SWITCH FOR 810

If your HAPPY ENHANCED 810 disk drive has been modified with a switch that allows you to write on the back side or on write protected disks you can cause a problem called the "SLOW HAPPY". With this switch set in the position where writing is always allowed the HAPPY does not see that you have changed disks. Changing disks may change the format and if HAPPY does not see the change the disk will read in spurts, with a long delay between each burst of data being read. The solution is to keep this switch in the position where the normal write protect notch circuit is working, except when you want to write on the back of the disk. The switch must have a position where the "WRITE PROTECT CHECK" in the HAPPY DIAGNOSTIC passes the test and be left in that position at all times except when you need to override the disk notch.

The problem especially shows up when you are looking at the directory of a group of disks which may have been formatted on different disk drives. Turning the HAPPY ENHANCED disk drive off and on always causes the HAPPY to read the format when the first read operation is requested. Never turn the disk drive off or on when a disk is inserted as bad sectors may be written over the disk! The HAPPY ENHANCEMENT needs to read the format from the disk each time a different disk is inserted, and is made aware of the disk change by automatically sensing a momentary change in the write protect. Even if the disk has no notch there will always be a momentary change as the old disk is removed and the new disk is inserted. With the write protect circuit disabled the HAPPY cannot sense the change of disks and the "SLOW HAPPY" syndrome may result, depending on which drive the disks were formatted on. The HAPPY BACKUP program does not depend on this since it always gets the format from each track.

As indicated above in item 5, the WARP SPEED PLUS upgrade for the 810 will allow use of a circuit similar to the HAPPY 1050 CONTROLLER. The circuit designed by us allows control of the write protect without interfering with the HAPPY 810 format detection explained above. Any installation of this type will require soldering. We would like to know from our customers in what form they would be willing to purchase and install this. Options include 1) a fully assembled board requiring 6 solder connections (\$59.95), 2) a kit of parts (\$49.95), 3) a blank PC board (\$12.95), 4) a schematic (free). The schematic will show how you can install a simple switch for the slow/fast mode selection. Before a decision can be made on offering this option we must know how our customers feel since many already have a write protect switch installed.

ORDERING WARP SPEED PLUS REVISION 7

Owners of HAPPY 1050 ENHANCEMENTS will normally receive the revision 7 with their ENHANCEMENT or will get it when available from the dealer they bought their ENHANCEMENT from. You need to continue reading this page only if you own an 810 HAPPY drive, or have a 1050 HAPPY that is not properly registered. WARP SPEED PLUS revision 7 may only be ordered using the order form in this flyer. To use the revision 7 or any future WARP SPEED SOFTWARE disk it is necessary that the EPROM software in the 810 ENHANCEMENT or modification be changed to the WARP SPEED PLUS custom controller IC. This change is needed only for 810 HAPPY boards, 1050 boards need no change to run revision 7. This new custom controller IC is specially made for HAPPY COMPUTERS by our suppliers and permits simple installation with no soldering, wiring, or cutting. It is a direct plug in replacement for the original EPROM. Each HAPPY 810 board you own will require this update IC. This new IC cannot be copied into an EPROM. Installation of this new IC is the only method by which your 810 HAPPY can use the newest features.

Installation of this new update IC in your 810 requires disassembly of the disk drive, unplugging the old EPROM, and plugging in the new IC. You may install this yourself, or you may have your dealer install this for you, or HAPPY COMPUTERS may install this, we do charge for installation, see the order form and price list. Contact your dealer to determine if they are participating in upgrade installation.

WARP SPEED PLUS UPDATE AND REGISTRATION POLICY

If you have bought a 1050 ENHANCEMENT registered with HAPPY COMPUTERS and it has a serial number between B6000 and B7999, and you have an 810 ENHANCEMENT or modification which is registered with us you will receive at no charge the WARP SPEED PLUS upgrade for each 1050/810 registered pair. You must return the order forms which show both your 810 and 1050 serial numbers to qualify for this. Also if you have an 810 ENHANCEMENT with a serial number higher than B5000 you may receive this upgrade for that drive at no charge (even if you do not have a 1050 ENHANCEMENT). Boards B0001 through B4999 and 810 modifications do not qualify. Only one free upgrade per qualifying 810 will be shipped.

If you do not qualify for a free WARP SPEED PLUS upgrade for your 810 per the above you may order this upgrade for your 810 HAPPY. For registered 810 HAPPY owners the charge is approximately equal to our cost in supplying this. The first upgrade purchased includes the IC, installation instructions, rev 7 disk, and usage instructions. Additional upgrades sent to owners of more than one registered ENHANCEMENT consist of the upgrade IC only, there is a lower price for this.

It is clarified that any 810 ENHANCEMENT (ECT) or HAPPY MODIFICATION can be registered with us. This flyer is sent to you because you are on our mailing list, this does not mean you have a registered ECT. All ECTs purchased from HAPPY COMPUTERS are automatically registered. All ECTs purchased from dealers are registered only if you send in the warranty card. If you lost the warranty card or it was lost in the mail you may still register your ECT by sending us the serial number along with a photocopy of your proof of purchase. If you bought the ENHANCEMENT second hand and the original owner was registered a proof of purchase will be accepted if written by the original owner.

Also accepted in lieu of proof of purchase will be a photo copy of the component side of the HAPPY ENHANCEMENT circuit board which clearly shows all components and the printed serial number label. It will help our determination if you can also provide the name of the dealer you purchased it from. HAPPY COMPUTERS reserves the right to refuse any registration (for low cost upgrade purposes) not done with an original warranty card.

If you sell a HAPPY ENHANCEMENT please provide the purchaser with some written proof of purchase. If you move please send HAPPY COMPUTERS a written change of address showing both old and new address. Change of address is accepted only in writing through the mail, do not call in for a change of address.

Beginning now, each registration which is not done using an original WARRANTY CARD will require a \$5.00 processing fee and there may be a delay in processing registrations of this type. This \$5.00 only applies to ENHANCEMENTS manufactured by HAPPY COMPUTERS that were not previously registered with us. This \$5.00 charge will be waived only if HAPPY COMPUTERS lost the registration on orders placed directly from HAPPY COMPUTERS, a photocopy of the original invoice from HAPPY COMPUTERS is required in this case.

Registered ECT owners will have a serial number indicated on their mailing label. This serial number starts with the letter B, D, M, or N followed by four digits, or may start with letter A followed by three digits. Separate flyers or separate labels may be attached to one flyer for each ECT you have registered. If there is no serial number on your mailing label for this flyer you are not presently registered. If your ECT was manufactured by HAPPY COMPUTERS and you are not registered you may still register it by the procedure in the previous paragraph. There is no time limit on sending in the registration information.

HAPPY 810 ENHANCEMENTS NOT MADE BY HAPPY COMPUTERS?

You may wonder why we are being so strict about the WARP SPEED PLUS revision upgrade. You may not be aware that there are some HAPPY modifications of various forms which were not manufactured by HAPPY COMPUTERS. Indeed some people have duplicated and sold HAPPY COMPUTERS' designs without our permission. In the past individuals in possession of these units have not been able to receive upgrades. Piracy of HAPPY COMPUTERS' products is expected to decrease since the new WARP SPEED PLUS INTEGRATED CIRCUIT cannot be copied into an EPROM. HAPPY COMPUTERS holds nothing against the owners of these units. Many of those that purchased them are unaware that they do not own the real thing. HAPPY COMPUTERS now provides a mechanism by which owners of these units may receive the WARP SPEED PLUS upgrade, and be treated as registered HAPPY owners for any future upgrades. There is a one time higher price for this service of registering hardware not manufactured by HAPPY COMPUTERS. Being registered in this fashion does not include any warranty on the hardware which was not manufactured by us. There will be a time limit on registering these units. At some point in time we will no longer sell this WARP SPEED PLUS IC to owners of pirated HAPPIES.

How can you tell if you have an "OFFICIAL HAPPY"? HAPPY COMPUTERS manufactures printed circuit boards that plug into the disk drive. All ENHANCEMENT circuit boards manufactured by HAPPY COMPUTERS are high quality boards with gold plated pins on the bottom and they install with no soldering and no permanent modifications. They all contain a copyright notification and the name HAPPY COMPUTERS or HAPPY COMPUTING, and a serial number label. They all have a ROM or EPROM on the board with a copyright notification. The EPROM originally in the drive is always removed and the original EPROM socket left EMPTY when the HAPPY is installed. Typical pirate HAPPIES have either some integrated circuits or a circuit board soldered and wired into the back of the 810 disk drive side board, or may plug into the side board with a cable or a combination of both. Nothing is more reliable than the real thing. HAPPY COMPUTING did manufacture a small number of hand wired boards in 1982 but we have all of these units registered. If you have a wired HAPPY and it is not registered it is definitely a pirate HAPPY.

Pirate HAPPIES may only be registered by paying the higher one time registration fee when purchasing the WARP SPEED PLUS upgrade. It is only fair to our customers that have purchased the real thing that this upgrade be sold at a substantially higher price to pirate HAPPY owners. All HAPPIES, pirated or not can be registered. How's that for support of a user base? If you own a pirate HAPPY and did not know this until after you bought it, that is if you were told you were buying the real thing you do have recourse against the person you bought it from. Take that person to small claims court. We can ask our legally qualified counsel to offer assistance should you need it.

PLEASE DON'T DRIVE US CRAZY!

HAPPY COMPUTERS is a small company with a small staff. Our office has several people that share the responsibility of all day to day business affairs. Each person contributes to research, development, sales, bookkeeping, errands, advertising, technical help, shipping, etc. Having only a few (all excellent) products allows us only this small staff when you consider how high our advertising expense is. Our actual manufacturing and test is done for us by companies that specialize in high quality work. They also do assembly for other larger companies and are well equipped to do this.

History has shown that each time we announce a new revision or new product or feature that even before it is officially announced (by this flyer) that our customer base responds in a quite enthusiastic manner. We appreciate your enthusiasm. However to stay in business we must rely on continuing sales of more product. Please do not continuously call and ask if a new product or revision is ready or has been shipped. This interferes with other persons ability to call and get through for real technical assistance or new sales.

HAPPY COMPUTERS now has a very large user base when compared with our staff. Lets consider the following example. Assume that seven thousand people call us once during the next 2 months to "CHECK ON THE NEW REVISION". With an average of 2 minutes per phone call, two people answering our two phone lines this takes about 29 full business days (about 1 and 1/2 months) just to answer the phone and repeat the same answers. Well this takes about 75% of our time. This leaves only about 25% of our time for real business activities. Wouldn't you rather let us use our time more efficiently?

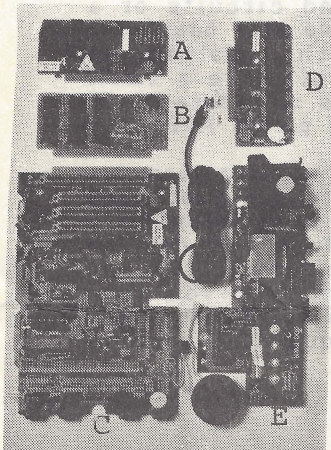
Well enough is too much. For those that require up to the minute product status we request that you use a modem and call "THE MUSHROOM" bulletin board. The number is (408) 779-1254 and you should use a password "HAPY" and complete our phone number 779-3830. Read your messages and see what's up.

Have patience, its easy! Just remember that everything in America takes twice as long to do as the original estimate said (just kidding). If our customers persist in spending 75% of our time asking for product delivery status we may need to become rude in our response. Please do not drive us crazy!

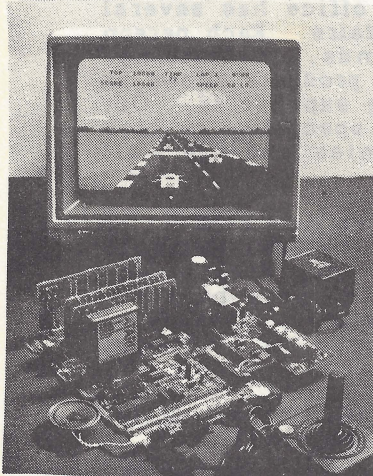
Please note: The follow information is provided for your use.
 Happy Computing Inc. & B & C are not affiliated.
 Orders should be placed directly with B & C.
 ** Special January 1985 **

B&C computer visions

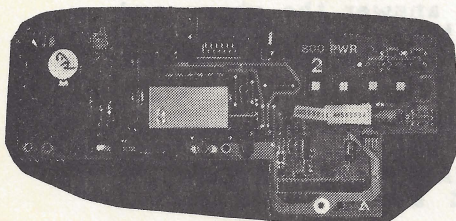
In May 1983 Atari stopped production of the 800/810/400. On the assembly line were assembled & tested PC boards ready to build thousands of these units. B&C purchased a large quantity of these PCB's & is now selling them at very low prices (prices subject to change). These PCB's are Atari surplus items & are only available while the supply lasts. Production has stopped, demand is high, prices will ? On certain items we have quantity prices which vary depending on availability. At the time we are writing this flyer Atari is clearing more buildings out to set up pilot production of their new 16 & 32 bit computers. We expect to get more surplus items as they make room for the new computers. Due to the confusion caused by the transfer of management nobody knows what we will find in the way of great surplus bargains on discontinued Atari products.????



Replacement PCB for 800/400 computers New with chips
 A. 10K OS with Math & ROM B chip set..... \$15.
 B. 800/400 CPU with GTIA, 6511 & ANTIC..... \$20.
 C. 800 Main with POKEY... \$30. 400 Main \$20.
 D. 16K RAM..... \$25.ea. less RAM chips..... \$5.
 E. 800 Power PCB.....\$5. 400 Power PCB..... \$3.
 RF cable... \$2. Speaker... \$2. TV Switch... \$3.50
 Used 800 outer case... \$40. Cast Shield..... \$40.
 Used 400 outer case... \$20. Cast Shield..... \$20.
 800/400/810/1050/850/Trak/Rana Power Pak..... \$20.
 800 XL Power Pak... \$30. 830 Power Pak..... \$15.
 800 Keyboard New... \$70. Repaired working... \$50.
 400 Keyboard... \$7.50 Small Power Pak..... \$7.50

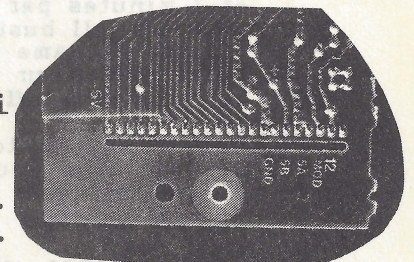


Spare parts kits with 800 Main, 10K OS, CPU
 16K RAM, Power PCB, speaker & RF cable..... \$75.
 Add a joystick, Power Pak, cartridge & you
 can play most games such as Pole Position.
 Add a 800 or 400 Keyboard, 32K Ram and you have
 a 48K Atari 800. Drop 16K RAM & it cost..... \$55.
 Please note that we do not recommend that you
 build a computer for anything other than the
 enjoyment an educational experience. We feel
 that these PCBs make an excellent spare parts
 kit for the home repair & upgrade of the computer.
 If you have an old computer with: Sudden lock ups,
 foil, not gold connectors, CTIA, Rom A, video problem,
 sound problem or any other problem the simple fix is
 to buy this spares kit & replace your old
 electronics with all new latest revision electronics.



Atari 800 Power

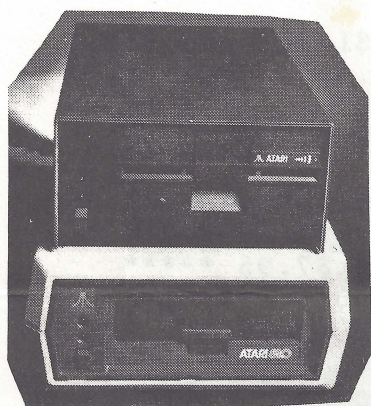
Parts Bonanza Atari 800/400
 power supply boards sold for
 parts only. Most are new with
 a small cut on them that Atari
 required us to make when we
 bought these as scrap parts.
 The parts alone are worth \$40.
 We have already sold thosands.
 800 PS 10ea.. \$10. 40ea.. \$20.
 400 PS 10ea.. \$7. 60ea.. \$15.



Typical cut

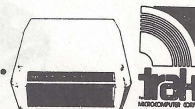
3400 El Camino Real  Santa Clara, CA 95051 408-554-0666

We are now assembling our own B & C 810 disk drive using the latest improved Atari PCBs. Early Atari 810 disk drives had many problems. These problems were all corrected in later production models. If you have an older drive without a data separator or the "Analog Upgrade"(also known as the "Grass Valley Upgrade"), the performance of your disk drive can be improved greatly by adding them. If you have the Happy Enhancement it includes the data separator but you still must add the "Grass Valley Upgrade". The data separator greatly improves the ability of the disk drive to read data above track 35 and is most noticeable when you have full disks. The "Grass Valley Upgrade" provides better read/write electronics, better motor speed control and a better 12 volt power supply. Both upgrades can easily be accomplished with a screwdriver, plyers & diagonal cutters. No cuts or jumpers are required. Atari did not make the mechanisms that are used in the 810 disk drives but bought them from MPI & Tandon. The MPI has the wide eject door and the Tandon has the lift lever door. Both are good mechanisms and work well. The B & C 810 uses the latest electronics & is available with either mechanism. Instead of a plastic case we assemble our drive in a custom black anodized aluminum case with a black no scratch Kydek top. Our drives come complete with I/O cable, power pak & a DOS/game demo disk. All electronics are 100% interchangeable with a standard Atari 810, but, our drive runs cooler & is smaller.

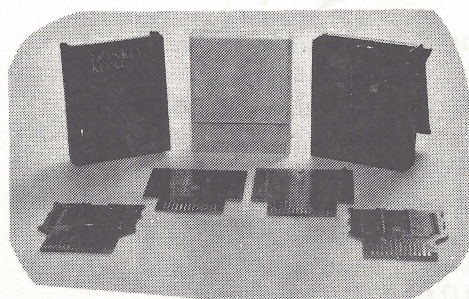


B & C 810 in black anodized case..... \$199.95
 Rebuilt Atari 810 in original case..... \$199.95
 Atari 1050 with Atari DOS 3.0..... \$199.95
 Happy Enhancement installed in above add \$199.95
 ** Repair/upgrade parts for Atari 810 Disk Drives
 810 side with data separator \$70. I/O cable \$15.
 810 side PCB... \$50. Data Separator... \$30.
 Grass Valley(GV) Power & Top PCB... \$50.
 GV Power supply... \$35. GV Top PCB... \$25.
 All 4 PCB less drive mech. \$100. Atari DOS II \$30.
 MPI or Tandon disk drive mechanism... \$100.
 All PCB & mechanism on mounting plate... \$175.
 Tandon door latch \$12. Tandon or MPI motor \$30.
 Tandon head assembly with stepper \$75.

MPI head assembly \$50. MPI stepper \$40. MPI pressure pad \$3.
 Indus GT with WP, DB & SS software. Rated the most reliable... \$315.
 Trak AT-D2 with Printer Port, printer buffer and TURBO.... \$275.
 Slave drive for Trak, Percom or ATR-8000 two sided double density. \$200.



***** Field Service Manuals and Test Cartridges *****
 Field Service Manuals with Schematics 800/400, 810 or 800XL... \$25.ea
 FSM 1200XL or 1050.... \$20.ea FSM 410, 835 or 820... \$15.ea
 800/400 Technical Reference Manual with OS source listings.. \$20.
 Atari 800 SALT II Cartridge. Test RAM, ROM, Video, Keyboard, ETC... \$25.
 Atari 810 Diagnostic Cartridge for testing disk drives. 5 tests.. \$25.
 Atari 810 Production Test Cartridge 2 hour drive burn in \$25.



PCB to make/repair game cartridges
 Atari & Sirius game PCB are made for custom ROMs. They can be used with EPROMs by modifying them. 16K Atari.. \$3.ea 8K.. \$1.ea
 Sirius 8K 20 for.. \$10. EPROM prices \$CALL
 16K EPROM PCBs with case(2X2764).... \$10.ea
 Romox 2732 or 2764 pcb with case(have solder splashes from having chips removed).. 10 for \$20.
 Rebuilt CITEL 37 \$1700 EPROM programmer..\$450.
 APROMXL EPROM programmer for Atari computers \$99.
 EPROM eraser 2 at a time \$35. 25 at a time \$50.

Hard to find Integrated Circuits to Repair your Atari Computer \$5. ea
 On CPU: GTIA, ANTIC, CTIA, CPU 6502(OLDER PCB), CPU 6511(NEWER PCB)
 On 10K OS: MATH ROM 399B, OS ROM 499B, OS ROM 599B
 On 810/850/VCS: MPU 6507, PIA 6532, RAM 6810, ROM C
 On 800/400 Main: POKEY, PIA 6520

***** Manuals for Atari Software *****

Microsoft Basic II, Atari Basic, Assembler Editor, Pilot .. \$5. ea
 DOS II Reference.. \$15. DOS II Source listings \$10. Visicalc Book \$15.
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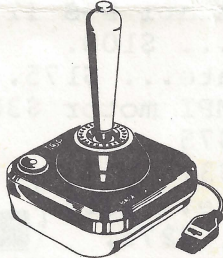
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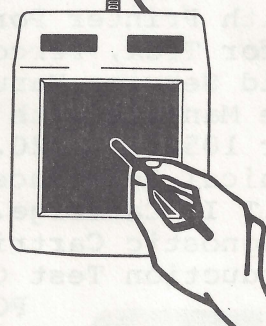
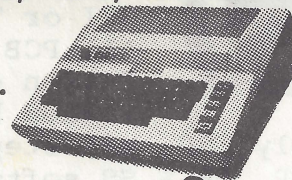
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